



REUSABLE NEWS



Recycled Paper Revisited

EPA has published a draft Paper Products Recovered Materials Advisory Notice (RMAN) in the *Federal Register* [60 FR 14182, March 15, 1995] concerning recycled paper. When final, the RMAN will update EPA's 1988 Procurement Guideline for Paper and Paper Products Containing Recovered

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The Results Are In!

In our Winter issue we announced a contest to revamp our masthead. Presented with four variations of trash cans, 88 readers voiced their votes. Seventy percent of the votes were paperless! The Ol' Standby (featured on the newsletter since its inception) was the official winner.

We were pleasantly surprised, however, to receive many other great ideas about what to do with our masthead. Many of these ideas focus on recycling and waste prevention. We decided, therefore, to keep the contest open by requesting additional ideas for the masthead, or even original artwork. (Call 202 260-6548; send email to Leigh.John@EPAMAIL.EPA.GOV; or write to the address on the back cover.)

This issue's masthead is compliments of reader Tim Schlender from Olympia, Washington, and features his cat, Stevie.

Let the Green Games Begin!

Spectators at the 1996 Summer Olympic Games in Atlanta could find themselves using readily available recycling bins and pumping ketchup out of bulk dispensers instead of squeezing it from individual packets. With the help of EPA, the Atlanta Committee for the Olympic Games is exploring numerous ways to incorporate

waste prevention and recycling into every aspect of the 100th Olympiad.

The sheer size of the Olympics—drawing millions of athletes and visitors from around the globe—creates enormous opportunities for waste reduction. The eight major

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McDonald's "Buy Recycled" Campaign Tops \$1 Billion

The McDonald's Corporation recently announced the purchase of its billionth dollar worth of products made from recycled materials. The company, which began its buy-recycled campaign in

1990, now spends more than \$300 million a year on recycled products. In 1994 alone, the company purchased 220,000 tons of packaging made from recycled materials.

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Mike Shapiro (EPA), Ruth Wooden (Ad Council), Fred Krupp (EDF), and Ed Rensi (McDonald's) help kick off the "Buy Recycled" campaign in Washington, DC, in January.



100 Ways To Prevent Waste



In just three years, McDonald's has implemented nearly 100 initiatives to prevent waste, recycle, and buy recycled in its 9,400 restaurants across the United States. Together, these initiatives have eliminated 7,500 tons of packaging annually.

The main thrust of McDonald's "Earth Effort" initiative is preventing waste in the first place—by making materials substitutions, design alterations, and changes in buying practices. Over the past year, McDonald's has saved \$5 million by reducing waste in the following ways:

- Reducing the raised designs on napkins. This simple action enables 23 percent more napkins to fit into a shipping container, saving 294,000 pounds of corrugated and 150 truckload shipments.
- Redesigning shake and sundae shipment boxes to achieve a 4-percent reduction in corrugated (450,000 pounds).
- Decreasing the thickness of trash can liners to reduce plastic waste by 2.1 million pounds.
- Converting hash brown containers from paperboard cartons to paper bags to save 2.9 million pounds of packaging.
- Redesigning french fry cartons to reduce the weight of paperboard packaging by 13 percent.

McDonald's is also contributing to toxics reduction by printing some of its packaging with soy-based inks, as well as using unbleached carryout bags and containers for some of its burgers.

In Europe, McDonald's restaurants are experimenting with a new form of waste prevention—edible dishware. An ice cream container and lid made from cookie dough have been developed by McDonald's of Germany to replace a plastic container. McDonald's of Austria is using breakfast plates made from a maize base. The plates, which were tested during the 1994 Winter Olympics in Lillehammer, Norway, are fed to livestock after use. 🌱

McDonald's uses recycled products in the construction and operation of all its U.S. restaurants. For example, plastic jugs for water, milk, and juice are made into McDonald's food trays; old car parts become steel frame restaurant chairs; and recycled tires end up as surfaces on the company's "Playland" playgrounds. Used consumer goods (such as newspapers and magazines) get a second life as carry-out bags, packaging, and napkins.

In addition to purchasing recycled products, McDonald's recently joined "Buy Recycled and Save." This initiative is the latest in a series of nationwide, educational recycling campaigns conceived by the Environmental Defense Fund (EDF) and the Advertising Council, and supported by EPA. In past years, the campaign focused on encouraging Americans to collect materials for recycling. To address the increasing need to build markets for recyclable materials, this year's campaign highlights the importance of buying recycled.

For its part, McDonald's will help spread the "buy-recycled" message on recycled paper soft drink cups, carryout bags, and trayliners. The trayliners teach consumers about products that typically contain recycled materials, such as cardboard egg cartons and aluminum beverage cans. They also instruct individuals in reading product labels to determine the postconsumer content of products such as cereal boxes and shampoo bottles.

For a free copy of an educational brochure on buying recycled, write to McDonald's, Department of Environmental Affairs, Kroc Drive, Oak Brook, IL, 60521. For more information on McDonald's Buy Recycled campaign, call Becky Caruso at 708 575-3678. 🌱

Reducing Bottlenecks in Plastics Recycling

When it comes to recycling plastic containers, purity and uniformity are crucial to a successful operation. In the best of all possible recycling worlds, no caps, labels, dirt, metal, or glue would be collected with containers, and the plastic types and colors would be the same. Consequently, plastics recycling would be more economical, and the value and utility of scrap plastic would increase significantly. In the real world, however, recyclers often have to sort and process complex mixtures of plastic types, colors, and foreign objects.

In an attempt to improve the economics of plastic recycling, the City/Industry Plastic Redesign Project was formed. The project's purpose is to encourage the redesign of plastic containers to reduce the number of separation steps needed before processing, making recycling easier and more cost-effective. When most plastic containers were originally designed, manufacturers did not consider recycling implications, since plastics recycling had not yet begun. Now that plastics recycling is a reality, appropriate improvements can be made.

EPA's Region 5 (serving Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin), EPA Headquarters, the Wisconsin Department of Natural Resources, and the New York Department of Economic Development funded the project. Participants included city recycling officials from Dallas, Texas; Jacksonville, Florida; Milwaukee, Wisconsin; New York, New York; San Diego, California; and Seattle, Washington, as well as industry representatives from Avery Dennison, Owens Illinois, Johnson Controls, Procter & Gamble, S.C. Johnson Wax, St. Jude Polymers, and EnviroPlastics. The project participants found that they had a lot of common ground; their major preliminary recommendations included the following:

1 Caps, closures, and spouts on high-density polyethylene (HDPE) bottles should be compatible with the type of plastic from which the bottle is made.

2 Colored caps should not be used on uncolored HDPE bottles (for example, red caps on clear milk jugs).

3 Aluminum caps should not be used on plastic bottles.

4 Consumers should be able to completely remove aluminum seals.

5 Label glues should dissolve in water. Water-soluble glues allow paper labels to float to the top, where they can be removed.

6 HDPE base caps should be phased out on polyethylene terephthalate (PET) bottles.

7 All layers in multilayered plastic containers should be compatible with each other.

8 Manufacturers of processing equipment should pursue the development of a low-volume, low-cost, automated sorting system for detecting polyvinyl chloride (PVC) for use in a materials recovery facility.

An area of debate among the participants involved the use of PVC in certain containers. City recycling officials recommended that when a container can be made from more than one type of plastic, PVC should not be used. (For example, a clear plastic bottle that contains salad oil or window washing fluid might be made of either PET or PVC.)

All the project participants agreed that the key to success in increasing the efficiency of plastics recycling is getting the word out on their recommendations. Once they finalize their recommendations, the next step is to reach industry trade associations, product manufacturers, packaging designers, recycling officials, and others. They will accomplish this by presenting the recommendations at conferences, distributing a report that summarizes the recommendations, making followup phone calls to key decision-makers, and developing a press release. 🗑️

For more information, contact Susan Mooney of EPA Region 5 at 312 886-3585. Technical questions can be directed to Peter Anderson of RecycleWorlds Consulting at 608 231-1100.

Green Packaging Award Is in the Bag



The latest and greenest idea in flexible packaging is the powder laundry detergent refill bag. Designed by Paramount Packaging Company for Procter & Gamble, the plastic bag is the 1994 winner of the third annual Green Globe Award. The Flexible Packaging Association (FPA) awards the Green Globe to one environmentally conscious product design each year to showcase source reduction, pollution prevention, and resource conservation efforts in flexible packaging.

"This year's award-winning package significantly reduces waste, incorporates postconsumer recycled content, and stacks nicely on store shelves," said Glenn E. Braswell, president

of FPA. The bag, which holds 9.5 pounds of detergent, is designed to refill large, "family-size" paperboard detergent boxes. Each bag contains 25 percent postconsumer plastic, and uses 80 percent less material than comparably sized detergent boxes.

FPA has been giving awards for innovative and quality flexible packaging since 1956, and the Green Globe Award since 1992. For more information, contact Marjorie Valin of FPA at 202 842-3880. 📠

FPA Conceives Source Reduction Logo

It's hard to depict something that doesn't exist. But in unveiling its new logo to promote "source reduction," the Flexible Packaging Association (FPA) has done just that.

Source reduction can be defined as the design, manufacture, purchase, or use of materials or products (including packages) to reduce their amount or toxicity before they enter the municipal solid waste stream. Unlike recycling, source reduction has not had the benefit of a universally accepted graphic symbol (like the "chasing arrows") to help communicate this crucial concept.

FPA's logo (pictured below) took about a year to develop. It features a diminishing dot pattern and the tagline, "Less waste in the *first* place." Any individual or group can use FPA's tagline, as long as it agrees in writing to use the tagline in an educational, informational, or nonspecific promotional manner. Only FPA members can use the logo. For more information, contact Marjorie Valin at the Flexible Packaging Association at 202 842-3880. 📠



Re-Refined Oil Purchases Revitalized

Federal agencies can now use re-refined engine oil in passenger vehicles and light-duty trucks, according to a recent policy directive issued by the General Services Administration (GSA). In the past, many purchasing agents had been reluctant to use re-refined oil because of concerns that automotive warranties would be voided if the oil was used.

The warranty concern was one of several issues discussed at a "summit meeting" held in December 1994 and sponsored by GSA and the Federal Environmental Executive. The meeting brought together govern-

ment fleet managers, automotive and petroleum industry representatives, and used oil re-refiners to discuss barriers and opportunities for increased use of re-refined oil by federal agencies. At the meeting, car manufacturers indicated that automobile warranties would be honored as long as the re-refined oil carries the "starburst" seal of approval granted by the American Petroleum Institute (API). Several brands have already received API certification.

This timely breakthrough clears the way for federal agencies to reap the benefits of using re-refined oil. It



also facilitates compliance with a requirement of Executive Order 12873 on Federal Acquisition, Recycling, and Waste Prevention; speeds up implementation of EPA's procurement guideline on re-refined oil; and encourages markets for this valuable, non-renewable, recovered resource.

For more information about re-refined lubricating oil, or for a copy of EPA's Procurement Guideline for Lubricating Oils Containing Re-Refined Oil, contact the RCRA Hotline at 800 424-9346. 📞

Green Games

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types of activities that EPA and the Committee are targeting for waste reduction are (1) food and beverage services, (2) merchandising, (3) logistics, including maintenance, cleaning, and inventory, (4) services for athletes and other residents of the Olympic Village, (5) community relations, (6) spectator services, (7) construction, and (8) the "look" of the Games, such as the development of banners and other Olympic displays.

EPA has made hundreds of specific suggestions for reducing waste at the Games, including:

- Composting food scraps from concessions and kitchens.
- Requiring vendors to minimize the use of transportation packaging in shipments of Olympic promotional products.

- Requiring vendors to use food service products, such as dishes and napkins, that are compostable.
- Using souvenir cups that can be refilled during the Games.

EPA presented its waste prevention opportunities report to the Committee in March. The suggestions chosen by the Committee will be integrated with its existing waste reduction efforts. Currently, the Committee has a goal of recycling or reclaiming 85 to 90 percent of the solid waste produced at the Games. The Committee has developed its own plans to meet this goal, such as using asphalt from the demolition of the Atlanta Fulton County Stadium as fill in the construction of parking lots after the Games and disassembling one running track after the Games for donation to local colleges.

Atlanta's efforts are following a growing trend toward environmen-

tal awareness at recent Olympics. The 1994 Winter Games in Lillehammer, Norway, were widely commended for their environmental initiatives, including the use of meal plates made from maize that were fed to livestock after use.

According to Betty Grant, program manager for community relations and coordinator of the organizing committee's environmental initiatives, "the Committee has made a commitment to stage the best Games in modern history. We could not keep that commitment without being sensitive and responsible to environmental issues. We have been very fortunate to have EPA working with us to guide our planning and decisions on environmental initiatives."

For more information on the Atlanta Olympic Games waste reduction project, contact Mary Felton of EPA at 703 308-7260. 📞

HHW Programs Keep Residents From Throwing It All Away

The number of household hazardous waste (HHW) programs in the United States has grown rapidly from just one in 1980 to nearly 5,000 today. These programs provide education, collection, reuse, and recycling services for communities to manage their HHW.

HHW is what some common household products become once they are disposed of, and can include such items as drain and oven cleaners, motor oil, paint thinners, and pesticides. The average household generates more than 20 pounds of HHW per year.

HHW collection programs vary in terms of frequency, structure, operating budget, and emphasis. Programs range from ongoing collection to one-day events. Some programs collect waste from small businesses as well as residents. All focus on educating residents about alternatives and reuse. However diverse these programs can be, they all share a common goal: to divert HHW from the municipal solid waste stream.

HHW programs in Washington, California, and Vermont provide examples of the types of activities communities can conduct to achieve HHW management goals. The city of Bellingham, Washing-

ton, is saving money on disposal costs and helping the community by providing a facility for residents to trade and reuse their HHW. In Santa Monica, California, the Environmental Programs Division's goal was to reduce toxics use by the city in both the community and its own offices. Vermont is educating consumers about toxics reduction as part of a Shelf Labeling Law.

Bellingham's Swap Shop

Have some extra paint? Drop it off. Need some household cleaner? Pick it up. That's how the reuse or "swap" program in Bellingham, Washington, works.

Bellingham's swap program has been serving approximately 145,000 residents in Washington's Whatcom County for over six years. The program is an offshoot of Bellingham's successful collection program. Reusable products collected through the HHW program are offered to residents at no charge. And residents are taking advantage of the swap shop. Over 1,100 individuals visited the facility in 1994.

Because every reused product is one less item the city has to pay to dispose of as hazardous waste, operating a reuse program actually reduces program costs. The program operates with one of the lowest budgets in the country, according to its coordinator, Alice Panny, of the Bellingham Department of Public Works. An operating budget of approximately \$78,000 a year pays

for the staff, supplies, the reuse program, and HHW disposal.

Panny uses a number of measures to save money. The program operates out of a modest facility and uses city staff, rather than contractors, to do the bulk of the work. According to Panny, if a community has an existing staff taking care of HHW collection and disposal, "a reuse program will save you money if you do it right."

To do it right, programs should ensure the safety of all products offered for reuse and avoid liability. Panny and her staff carefully evaluate each product considered for reuse. This means checking the condition and age of each product and package. ("No leaks, holes, or chunks" are acceptable, says Panny.) Also, the product label (where instructions on how to properly use the product are listed)

must be intact. In addition, no suspended or canceled, pesticides are put on the reuse shelf, nor are any inherently dangerous products. In addition, like many communities that offer reuse programs, Bellingham asks people to sign a disclaimer of responsibility for any injuries that might result from the improper use of items they pick up from the shelves.

With some of the money it has saved, the program will move into a larger, yet still modest, facility next year.

For more information, contact Alice Panny of the Bellingham Department of Public Works, Solid Waste Division, at 360 676-6850.

Santa Monica: Practicing What It Preaches

City custodians in Santa Monica probably never thought they would don lab coats. But for over a year now, these individuals have been the key technicians in an "experiment" involving the use of alternative cleaning products.

In July of 1993, as part of its ongoing efforts to reduce toxics use in the community, the city of Santa Monica decided to turn its attention to its own government buildings. During a 10-month pilot study, custodians tested alternative polishes; waxes; and furniture, glass, carpet, and other cleaners. The purpose of the pilot was to minimize workplace exposure to potentially toxic chemicals and to develop criteria for buying cleaning products in the future.

For the study, city officials selected several alternative commercial cleaning products with a proven track record in commercial applications and environmental and health safety. Custodians throughout the city tested the products in their buildings. At the conclusion of the study, the custodians determined that the alternative products performed as well or better than traditional cleaning



Santa Monica Goes to Hollywood

Most local governments that set out to produce an educational film for the community don't wind up with an Emmy Award nomination. But the City of Santa Monica did just that with its film about household hazardous waste (HHW) entitled "When We Throw It Away...Is It Really Away?"

Made originally for local television, the 30-minute film discusses the issues associated with managing HHW. In particular, it discusses the financial costs incurred by the city to dispose of HHW. "Many cities spend a lot of money on HHW," states Brian Johnson, the environmental programs coordinator for the City of Santa Monica and co-producer of the film. "We all need to come to terms with why we are doing this." The film suggests several alternatives to disposing of HHW, including reusing leftover products and using less-toxic alternatives.

Since the film garnered so much attention in Hollywood, the city decided to expand the film and share it with the nation. A new, one-hour version of the film provides a more comprehensive look at HHW management nationwide, and even presents some international perspectives on the issue.

The film is now being marketed to public television stations across the country.

For more information on Santa Monica's toxics reduction program or the HHW film, contact Brian Johnson or Debbie Raphael with the City of Santa Monica Environmental Programs Division at 310 458-8228 and 310 458-2255, respectively, or at 310 393-9975. 

products. Not only did the products clean well, but the city also reduced its purchasing costs by four percent.

The enthusiasm of the custodial staff was critical to the pilot's success. The study was more complicated than simply switching products, according to Debbie Raphael of the Santa Monica Environmental Division. "If you don't have the support of the custodians, the project

will fail." Initially, the custodians did not believe that the alternative supplies would perform favorably, but their response changed once they actually tested the products.

At the conclusion of the pilot, city officials developed purchasing criteria for a new line of cleaning products. Santa Monica elicited the help of the Washington Toxics Coalition and Green

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Focus on HHW: Santa Monica

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Seal, two organizations dedicated to toxics reduction, to draft the criteria. The city then bid on a number of product lines using the newly developed criteria and evaluated the products based on environmental and human health considerations and cost, as well as the custodians' ratings of product performance. The city has just

begun to purchase the new products for permanent use.

Vermont Consumers are Label Conscious

Walk into almost any retail store in Vermont, and you're likely to find clerks doing more than simply stocking goods. They'll also be taping yellow labels onto shelves displaying certain kinds of household products that contain hazardous constituents.

The shelf labels are required by a Vermont law that applies to all retailers in the state (including hardware stores, general stores, and gas stations). Under the law, retailers also must provide educational pamphlets to consumers at the time of purchase.

Together, the brochures and labels are designed to teach people about the products they buy.

The brochures provide additional information about the availability of alternative products. The program is patterned after a similar one in Iowa, which was the first state in the nation to pass a shelf labeling law.

To make consumers aware of the label program, the Vermont Agency of Natural Resources (the Agency tasked with running the program) conducts numerous outreach activities, ranging from newspaper advertisements to radio broadcasts. To assess the effectiveness of its efforts, the agency conducts periodic surveys. According to its most recent outreach campaign and followup survey, the agency's efforts have been successful. In 1994, while 46 percent of respondents indicated they had seen, heard, or read information about the program before the outreach campaign, 58 percent of survey participants



could recall being aware of the information after the campaign. This awareness shows a 12-point increase in awareness due to the campaign. It also shows a 19-point increase in the level of awareness since 1992, based on a similar survey, when the only outreach efforts were through pamphlets and posters.

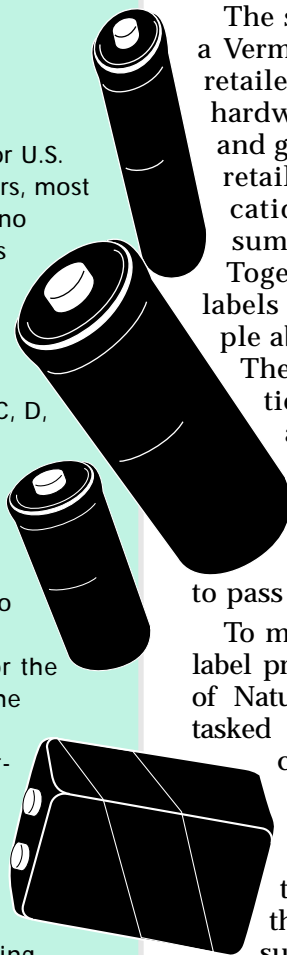
Outreach efforts seem to be affecting the number of people noticing the shelf labels as well. Before the 1994 outreach campaign, 25 percent of the survey participants recalled seeing the shelf labels. After the campaign, 38 percent of survey participants recalled seeing them—a 13-point increase. In addition, in 1994, nearly 58 percent of people who were aware of the shelf labels claimed to be buying fewer products containing hazardous constituents. These results are considered "statistically significant," according to the Agency. In fact, the Agency believes that the 1994 survey "shows some real gains in consumer awareness," according to John Miller, in the Agency's Department of Environmental Conservation.

For more information on the program, call John Miller at the Vermont Agency of Natural Resources at 802 241-3444. 🗑️

Battery Manufacturers Charge Ahead


Thanks to many major U.S. battery manufacturers, most consumer batteries no longer contain high levels of mercury. The industry has been steadily decreasing the mercury content in "dry-cell" batteries (such as AAA, AA, C, D, 9-volt, and alkaline varieties) since 1984. Now, many of these batteries have been reformulated and are 99.975 percent mercury free, according to the industry.

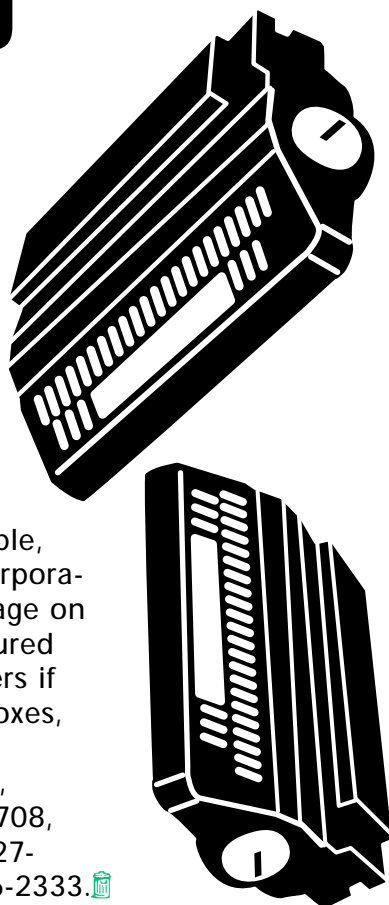
The next challenge for the industry is to improve the efficiency of recycling technologies for recovering valuable metals contained in dead batteries. Recovered metals can be used again as raw materials in industrial manufacturing, such as in the steel industry. Battery manufacturers in the United States are working with European and Japanese companies on this effort, and one company estimates that improved technologies will be available by the year 2000. 🗑️



DID YOU KNOW?


It's now easier than ever to recycle used toner cartridges from your laser printer. While hundreds of independent recyclers nationwide accept used toner cartridges, you now can mail them free of charge to meet their maker. Canon, Hewlett-Packard, Apple, and Digital Equipment Corporation will pick up the postage on used cartridges manufactured specifically for their printers if shipped via UPS or Mailboxes, Etc.

For more information, call Canon at 800 962-2708, Hewlett-Packard at 800 527-3753, or Apple at 800 776-2333. 



Reusable News Online — New and Improved!

Thanks to recent advances in computer software, graphic versions of *Reusable News* are now available online! Unlike the text-only versions that EPA has been posting on the Internet since last spring, these issues include all the newsletter's graphics—the photos, illustrations, and page designs—that add context, convey related information, and are often just plain fun.

The files are created using Adobe Acrobat software and can be found on the EPA Public Access Server. While a special reader is needed to view the files, an Acrobat Reader v. 2.0 is available free of charge in many locations on the Internet. EPA also has made a copy available on its Public Access Server. So next time you're checking out EPA's Internet offerings, look for the new online graphic versions of *Reusable News*—and treat yourself to the latest in paperless information! The address is gopher.epa.gov under EPA Offices and Regions, Office of Solid Waste. 

Finding Hidden Source Reduction Numbers

You've started using ceramic mugs instead of disposable cups, made arrangements to return shipping crates for reuse, and duplex copy nearly all documents. You've forged ahead with source reduction, and now wonder how to measure the dollars you've saved and the waste you've reduced.

You are not alone. Measuring source reduction results can be challenging for both communities and organizations. Communities can find it difficult to get good baseline data on waste generation in the first place. Distinguishing between residential and commercial waste generation also can be challenging. For organizations, it can be hard to tell if the waste reductions they are achieving are truly due to source reduction

activities or some other variable, such as changes in the scope or scale of operations.


To begin tackling these issues, EPA joined forces with the Center for Policy Alternatives, an organization dedicated to promoting progressive policies at the state level. For two days last December, the two groups convened a Source Reduction Measurement Roundtable. Approximately 25 technical experts, academics, industry representatives, and government officials attended the roundtable to strategize methods for source reduction measurement nationwide.

By defining source reduction practices, identifying barriers and opportunities to source reduction measurement, and evaluating effective ways already used to

measure source reduction, participants developed a number of short- and long-term actions to encourage source reduction measurement in communities and in industry. Among these, the group identified two critical needs:

- Standardizing data, definitions, and methods for collection and reporting information.
- Developing baseline waste generation data and relating them to economics and the population at the national, state, and local levels.

To this end, EPA is initiating several source reduction measurement pilot projects.

For copies of the final proceedings from this Roundtable, call Elizabeth Kelly at the Center for Policy Alternatives at 202 387-6030. 

Revised Standards for Recycled Paper Proposed

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Materials by recommending new recovered materials content levels for paper purchased by federal agencies, their grantees, and contractors. EPA also expects the new guidance to be widely used by private sector purchasers.


The revised recycled content levels are intended to increase the use of recycled paper products made from recovered paper, as well as increase the collection of discarded paper from offices and homes. EPA's new, two-tiered recommendations are expressed as percentages of total recovered and postconsumer fiber. In most cases, EPA is proposing a range of recovered fiber content for each paper item. Based on levels currently used in recycled paper products, the ranges are also intended to encourage manufacturers to use the maximum amount of postconsumer and other recovered fiber without compromising competition or product performance and availability. This is the same approach that EPA used in the RMAN for the Comprehensive

Procurement Guideline (CPG) published in 1994. Federal agencies are responsible for actually buying products that meet their needs based on what is available to them within the ranges recommended by EPA.

Executive Order 12873 on Federal Acquisition, Recycling, and Waste Prevention, issued by President Clinton in October 1993, established the RMAN as a mechanism to update EPA's procurement guidelines. The draft Paper Products RMAN incorporates the recycled content requirements for printing and writing papers mentioned in Section 504 of the Executive Order. EPA is also recommending new standards for tissue products, corrugated, and paperboard, and is adding several new items. The RMAN covers over 50 different paper items—virtually every type of paper purchased by government agencies (see box below).

In addition to recommending content levels, the RMAN dis-

cusses several issues that have surfaced since the paper procurement guideline was implemented. For example, it discusses the method of calculating recycled content and clarifies the types of paper waste generated by paper mills that can count toward recycled content. In the RMAN, EPA also suggests that agencies consider how the papers they purchase affect the type and amount of paper waste they generate.

EPA received public comments on the RMAN after it was published in the *Federal Register*. The RMAN is available through the EPA Public Access Server on the Internet at gopher.epa.gov. For a paper copy of the *Federal Register* notice as well as the Draft Paper Products RMAN Supporting Analyses, contact the RCRA Hotline at 800 424-9346, or in the Washington, DC, metropolitan area, 703 412-9810. For technical information about the Paper Products RMAN contact Dana Arnold of EPA at 703 308-7279. 

Items Included in the Draft Recycled Paper RMAN

Reprographic (copier paper)

Offset

Tablet

Forms Bond (computer printout)

Envelopes

Cotton Fiber Paper

Text and Cover

Supercalendered (groundwood printing paper)

Check Safety Paper

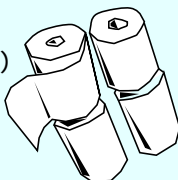
Coated Printing Paper

Carbonless

File Folders

Dyed Filing Products

Pressboard Report Covers



Cards

Tags and Tickets

Newsprint

Bathroom Tissue

Paper Towels

Paper Napkins

Facial Tissue

Industrial Wipers

Corrugated Containers

Solid Fiber Boxes

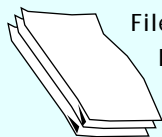
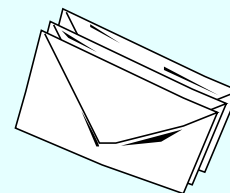
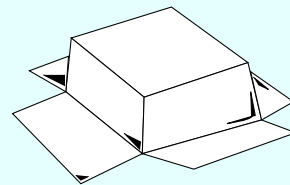
Folding Cartons

Industrial Paperboard

Miscellaneous Paperboard

Carrierboard

Brown Papers (wrapping paper and bags)




Tackling the Tradeoffs

Two Resources on Life-Cycle Analysis

Which is the most environmentally preferable—plastic or paper bags? Asking a question like this is somewhat akin to inquiring, “Which came first, the chicken or the egg?” In other words, there is no easy answer.

To begin answering such a question, one would need to evaluate the environmental impacts associated with each product over its entire “life cycle.” (The life cycle of a product encompasses every step in its manufacture, use, and ultimate disposal, including extraction of raw materials.) Throughout the life cycle of a product or package, raw materials, energy, and water are all expended. In addition, emissions can be released to the air, water, and land—both during the manufacture of a product and once it is disposed of. To assess and weigh all of these variables, experts conduct Life-Cycle Analyses (LCA).



The life cycle of a product encompasses every step in its manufacture, use, and ultimate disposal.

In recent years, there have been many approaches to conducting LCAs. To help LCA practitioners improve and standardize their approach, EPA recently published two documents:

- *Life-Cycle Assessment: Public Data Sources for the LCA Practitioner* (NTIS document number PB95-191 227) provides brief descriptions of publicly available electronic databases that could be helpful in conducting LCAs. The databases contain nonproprietary information about products and processes, including energy required, raw materials used, and emissions released. This document should be especially useful to practitioners new to LCA and those that cannot access proprietary industry databases. Cost information on the use of these databases is provided in the document.
- *Guidelines for Assessing the Quality of Life-Cycle Inventory Data* (NTIS document number PB95-191 235) provides a suggested framework to help LCA practitioners obtain better data and standardize their methodologies, assumptions, and documentation of data.

These documents are available from the National Technical Information Service (NTIS) at the U.S. Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22161. You can also obtain these documents by calling 800 553-6847 or 703 487-4650, or by faxing your request to 703 321-8547. 📠

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UPDATE

Charter Endorsers Lead the Way

Twenty-three Charter Endorsers have signed on to support WasteWi\$E. Endorsers are trade associations and other membership-based organizations that carry the waste prevention, recycling, and buy-recycled torch, and encourage their members to become WasteWi\$E partners. The Charter Endorsers are:

- American Iron and Steel Institute
- American Textile Manufacturers Institute
- The Business and Institutional Furniture Manufacturer's Association
- Direct Marketing Association, Inc.
- Edison Electric Institute
- Electronic Industries Association
- Food Marketing Institute
- Foodservice & Packaging Institute
- The Glass Packaging Institute
- Grocery Manufacturers of America
- Institute of Packaging Professionals
- National Association for Environmental Management
- National Association of Photographic Manufacturers, Inc.
- National Automobile Dealers Association
- National Retail Federation
- National Soft Drink Association
- National Wooden Pallet and Container Association
- Newspaper Association of America
- Polystyrene Packaging Council
- Steel Manufacturers Association
- Steel Recycling Institute
- The Vinyl Institute
- Virginia Recycling Association

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Source Reduction PSAs Hit the Airwaves

A series of TV public service announcements (PSAs) on waste prevention has already reached more than triple the originally targeted audience. Halfway through the campaign, the PSAs, which began airing nationwide in January, had made more than 650 million audience impressions (the number of times viewers see the spots). The original goal was to make 200 million impressions over a six-month period.

These quick-paced, humorous PSAs, which challenge citizens to

"Reuse stuff today....Reduce garbage tomorrow," were created by the National Audubon Society with funding and assistance from EPA.

In addition to the TV PSAs, radio ads have also been aired on more than 23,000 stations nationwide, (approximately 92 million audience impressions). Print ads also have been sent out to the nation's top 1,000 newspapers.


For more information on the PSAs, contact Adaora Lathan at the National Audubon Society at 202 547-9009. 

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Many of these Endorsers are encouraging their members to join WasteWi\$e through direct mailings or articles in their association newsletters. Some Endorsers have asked EPA, or one of their member companies, to speak about WasteWi\$e at upcoming association meetings.

Other Endorsers are integrating WasteWi\$e outreach efforts with their existing environmental initiatives. For example, the American Textile Manufacturers Institute will recommend that companies join WasteWi\$e to fulfill a requirement in its "Encouraging Environmental Excellence Program," which requires members to participate in voluntary programs.

EPA thanks all WasteWi\$e Endorsers for their support in sharing the waste reduction message. 



Artie Olson used the same cloth shopping bag 524 consecutive times. Until a stampede for half-price papayas ended his streak.



By not using paper bags, Mr. Olson eliminated more than 100 pounds of garbage.



Selected frames from a joint Audubon/EPA public service announcement on waste prevention airing nationwide.

Address comments or free subscription requests to:

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